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ABSTRACT

15       Apparatus and method for enhancing combustion comprises  
an enclosure defining an opening for introduction of a gas and  
openings for the introduction of air, with a nozzle in the opening for  
introduction of a fuel gas into the enclosure. First and second electrodes are  
located in the enclosure, the first and second electrodes being coated with  
20       dielectric material, and being connected to an electrical power supply. With  
electrical power applied to the first and second electrodes and with the fuel  
gas sprayed into the enclosure, an atmospheric pressure plasma created by a  
dielectric barrier discharge is produced in the enclosure that cracks the fuel  
gas prior to its mixing with air introduced through the openings for the  
25       introduction of air.

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